

Amendment
Serial No. 09/933,884
Page 11 of 14

REMARKS

The above-listed claim amendment and the following remarks are fully responsive to the Office Action set forth above.

Claim 98 is amended to correct its dependency. Claim 98 was incorrectly presented as depending from claim 96. As amended, claim 98 now properly depends from claim 97. No new matter is introduced into the application by the claim amendment.

After entry of this Amendment, claims 47-98 are pending. The Examiner objected to claims 65-75 and 88-95, and indicated that those claims would be allowable if rewritten in independent form.

The present invention provides an imageable composition, an imageable element comprising the imageable composition, and a method of making the imageable element. The invention further provides a method of making an imaged element from an imageable element.

Each pending claim of the present application recites an imageable composition comprising an acid curable composition, an acid generator, and a specified colorant, wherein the colorant includes a counter anion derived from a non-volatile acid. Some embodiments further comprise an infrared absorber (e.g., the present claim 67), which may optionally include a counter anion derived from a non-volatile acid (e.g., the present claim 70). In some embodiments (e.g., the present claim 71), the counter anion is derived from a non-volatile sulfonic acid.

Claim Rejections – 35 U.S.C. § 102

The Examiner rejected claims 47-64, 76-87 and 96-98 as anticipated by U.S. Patent 5,340,699 to Haley, *et al.* ("Haley"). The Examiner stated that Example 1 of Haley reports a composition comprising a resole resin, a novolak resin, an onium salt, and an infrared dye having a sulfonate counter ion. The Examiner asserted that the composition reported in Example 1 of Haley anticipates the present claims.

Applicants respectfully submit that claims 47-64, 76-87 and 96-98 are not anticipated by Haley. Each of the rejected claims recites an imageable composition comprising an acid curable composition, an acid generator, and a colorant, wherein the colorant includes a counter anion

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Amednment
Serial No. 09/933,884
Page 12 of 14

derived from a non-volatile acid. The compositions of Haley do not include a colorant having a counter anion derived from a non-volatile acid.

The term "colorant" is defined in Hawley's Condensed Chemical Dictionary (12th Ed. 1992) as "[a]ny substance that imparts color to another material or mixture." The inclusion of a conventional colorant in a photosensitive layer of an imageable element, such as a lithographic printing plate precursor, is common. A colorant is often used to provide or enhance contrast between image areas and non-image areas of an imaged element.

For example, U.S. Pub. App. 2003/0003399 of Müller, *et al.* reports an infrared-sensitive composition suitable for the manufacture of printing plates. Paragraph [0015] states that "The compositions may furthermore contain a colorant for increasing the contrast of the image compared to the background after development." U.S. Pub. App. 2003/0162127 of Kikuchi reports a lithographic printing plate precursor comprising a photosensitive layer. At paragraphs [0073]-[0074], a colorant is suggested as an optional component of the photosensitive layer:

[V]arious compounds may be further added, if desired. For example, a dye having a large absorption in the visible light region may be used as a colorant of the image....The colorant is preferably added so as to provide clear distinction between the image area and the non-image area after the image formation.

Likewise, U.S. Pat. No. 6,623,910 to Shimada, *et al.* reports a printing plate precursor having a photosensitive layer. A colorant is suggested as an additional component at column 38, lines 48-63: "For coloring the photosensitive layer, a dye or pigment may be added to the layer. The dye or pigment added to the layer improves the visibility of the processed plate and broadens plate inspection latitude in a process of measuring the image density of the processed layer."

In sum, a colorant is characterized by significant absorption in the visible region, and functions to enhance contrast between image areas and non-image areas of an imaged element.

Although Haley reports at Example 1 an imageable composition comprising an "infrared-absorbing dye" (see col. 8 at line 8) having an anion derived from a sulfonic acid, Haley does not report an imageable composition having a *colorant* as recited in the present claims (i.e., a colorant having a counter anion derived from a non-volatile acid). In the compositions of Haley, a colorant is an optional additive:

As explained hereinabove, the four essential ingredients of the radiation-sensitive composition of this invention are a resole resin, a novolac resin, a latent Bronsted

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Amednment
Serial No. 09/933,884
Page 13 of 14

acid and an *infrared absorber*. Other ingredients which can optionally be incorporated in the composition include *colorants*, stabilizers, additional sensitizers, exposure indicators and surfactants. (Emphases added.)

See Haley, col. 6 at lines 15-21. The function of the infrared-absorbing dye in Example 1 of Haley is to act as the aforementioned infrared absorber, not as a colorant. The infrared-absorbing dye used in Example 1 would not exhibit a significant absorbance in the visible region, and would not adequately enhance contrast between image areas and non-image areas of an imaged element.

In short, Haley reports the inclusion of an optional colorant in an imageable composition; Haley does not report an imageable composition comprising a colorant having a counter anion derived from a non-volatile acid. Haley cannot anticipate the present claims, and withdrawal of the rejection is requested.

The Examiner rejected claims 47-64, 76-87 and 96-98 as anticipated by U.S. Patent 6,423,462 to Kunita ("Kunita"). The Examiner stated that Examples 1-4 to 1-8 and 2-4 to 2-8, as well as Comparative Examples 1-8 anticipate the claimed invention.

Applicants respectfully submit that claims 47-64, 76-87 and 96-98 are not anticipated by Kunita. As stated above, each of the rejected claims recites an imageable composition comprising an acid curable composition, an acid generator, and a colorant, wherein the colorant includes a counter anion derived from a non-volatile acid.

The compositions of Kunita do not include a colorant having a counter anion derived from a non-volatile acid. The compositions of Kunita include an "infrared absorbent." One suitable infrared absorbent, the structure of which is shown at the top of col. 55, includes an anion derived from p-toluenesulfonic acid.

In short, Kunita is similar to Haley in that both report an infrared absorber (Haley) or an "absorbent" (Kunita) having an anion derived from a sulfonic acid. Neither, however, reports an imageable composition comprising a *colorant* having a counter anion derived from a non-volatile acid. Kunita likewise cannot anticipate the present claims 47-64, 76-87 and 96-98, and withdrawal of the rejection is requested.

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Amendment
Serial No. 09/933;884
Page 14 of 14

Conclusion

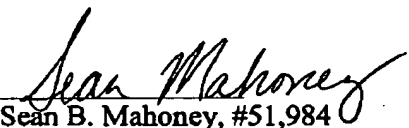
All pending claims are now in condition for allowance. A notice to that effect is respectfully requested. If any outstanding issues remain after consideration of this Amendment, the Examiner is invited to call the undersigned attorney at the number given below.

Respectfully Submitted,

EIJI HAYAKAWA et al.

Dated: May 12, 2004

By


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Hawley's
Condensed Chemical
Dictionary

TWELFTH EDITION

Revised by
Richard J. Lewis, Sr.



VAN NOSTRAND REINHOLD COMPANY
New York

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characteristic of matter when one or more of its dimensions lie in the range between 1 millimicron (nanometer) and 1 micron (micrometer). It thus includes not only finely divided particles but also films, fibers, foams, pores, and surface irregularities. It is dimension that is characteristic, rather than the nature of the material. Colloidal particles may be gaseous, liquid, or solid, and occur in various types of suspensions (imprecisely called solutions), e.g., solid-gas (aerosol), solid-solid, liquid-liquid (emulsion), gas-liquid (foam). In this size range, the surface area of the particle is so large with respect to its volume that unusual phenomena occur, e.g., the particles do not settle out of the suspension by gravity and are small enough to pass through filter membranes. Macromolecules (proteins and other high polymers) are at the lower limit of this range; the upper limit is usually taken to be the point at which the particles can be resolved in an optical microscope. The first specific observations were made by Thomas Graham approximately 1860, and were extended by Ostwald, Hatchek, and Freundlich. Though the term is often used synonymously with surface chemistry, in a strict sense it is limited to the size range noted in at least one dimension, whereas surface chemistry is not. Natural colloid systems include rubber latex, milk, blood, egg white, etc. See also surface chemistry; colloid, protective; emulsion.

colloid mill. See homogenization.

colloid, protective. A hydrophilic high polymer whose particles (molecules) are of colloidal size, such as protein or gum. It may be either naturally present in such systems as milk and rubber latex, or intentionally added to mixes to stop coagulation or coalescence of the particles of fat or other dispersed material. Protective colloids are also called stabilizing, suspending, or thickening agents; they also act as emulsifiers. Examples are (1) hydrocarbon particles of latex, which are covered with a layer of protein that keeps them from cohering as a result of the impact due to their Brownian motion; (2) gelatin, sodium alginate, or gum arabic, which are added to ice cream to inhibit formation of ice particles, and to confectionery and other food products to obtain a smooth, creamy texture. They are readily adsorbed by the suspended particles and reinforce the protective effect of proteins that may be naturally present.

See also thickening agent; gum, natural; gelatin.

"Colloisol" [BASF]. TM for a series of vat dyes for dyeing and printing textiles of cellulosic fibers.

cologne. (toilet water). A scented, alcohol-based liquid used as a perfume, after-shave lotion, or deodorant. Combustible.

Cologne brown. See Van Dyke brown.

colophony. A rosin residue which remains after the volatiles have been removed by distillation of crude turpentine from any of the *Pinus* species.

colorant. Any substance that imparts color to another material or mixture. Colorants are either dyes or pigments, and may either be (1) naturally present in a material (chlorophyll in vegetation), (2) admixed with it mechanically (dry pigments in paints), or (3) applied to it in a solution (organic dyes to fibers).

Note: There is no generally accepted distinction between dyes and pigments. Some have proposed one on the basis of solubility, or of physical form and method of application. Most pigments, so called, are insoluble, inorganic powders, the coloring effect being a result of their dispersion in a solid or liquid medium. Most dyes, on the other hand, are soluble synthetic organic products which are chemically bound to and actually become part of the applied material. Organic dyes are usually brighter and more varied than pigments, but tend to be less stable to heat, sunlight, and chemical effects. The term colorant applies to black and white as well as to actual colors. Instruments for measuring, comparing, and matching the hue, tone, and depth of colors are called colorimeters.

See also dye, pigment, colorimetry, food color, FD&C color.

"Colorex" [Stauffer]. TM for titanium trichloride in aqueous solution with zinc chloride. Dark violet to black liquid.

Use: Powerful reducing agent, dye stripper for textiles.

colorimeter. An analytical device used to measure the comparative intensity of color in solutions by comparison with standard solutions. See: Photoelectric colorimeter.

colorimetric analysis. Analysis based on the law that intensity of color of certain solutions is proportional to the amount of substance in the solution.

colorimetric purity. The ratio of luminance of spectrally pure light that must be mixed with reference achromatic (white) light to produce a color match for the specimen light.

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